



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/552,678	10/10/2005	Andreas Bacher	WAS0708PUSA	3843		
22045	7590	02/21/2008	EXAMINER			
BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075				OJURONGBE, OLATUNDE S		
ART UNIT		PAPER NUMBER				
4145						
MAIL DATE		DELIVERY MODE				
02/21/2008		PAPER				

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/552,678	BACHER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	OLATUNDE S. OJURONGBE	4145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 8-16 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 8-16 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20061018.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_.

## DETAILED ACTION

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 8 -16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 23&13, 14, 15, 16, 17, 18, 19, 24 and 25 of copending Application No. US 10/557751. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 8 of the instant application is not patentably distinct from claims 23 and 13 of copending application US 10/557751, because all the limitations of the instant claim 8 are also recited in claims 23 and 13 of US 10/557751.

The combination of claims 8 and 23 of the copending application US 10/557751 is taken into consideration while determining patentability of the instant claims 9-16.

Claim 9 of the instant application is not patentably distinct from claim 14 of copending application US 10/557751, because all the limitations of the instant claim 9 are recited in claim 14 of the copending application.

Claim 10 of the instant application is not patentably distinct from claim 15 of copending application US 10/557751, because all the limitations of the instant claim 10 are recited in claim 15 of the copending application.

Claim 11 of the instant application is not patentably distinct from claim 16 of copending application US 10/557751, because all the limitations of the instant claim 11 are recited in claim 16 of the copending application.

Claim 12 of the instant application is not patentably distinct from claim 17 of copending application US 10/557751, because all the claim limitations of the instant claim 12 are recited in claim 17 of the copending application.

Claim 13 of the instant application is not patentably distinct from claim 18 of the copending application US 10/557751, because all the limitations of the instant claim 13 are recited in claim 18 of the copending application.

Claim 14 of the instant application is not patentably distinct from claim 19 of the copending application US 10/557751, because all the limitations of the instant claim 13 are recited in claim 14 of the copending application.

Claim 15 of the instant application is not patentably distinct from claim 23 of the copending application US 10/557751, because all the limitations of the instant claim 15 are recited in claim 23 of the copending application.

Claim 16 of the instant application is not patentably distinct from claim 25 of copending application US 10/557751, because all the limitations of the instant claim 16 are recited in claim 25 of the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uwe et al (DE 3727078) in view of Maruyama et al (US 4,708,947) in further view of Maruyama et al (US 4,617,239)

Regarding claims 8, 10 and 14 Uwe et al discloses a process for the preparation of release films and coatings on a substrate (col.2, lines 34-44) by applying a primer to the substrate ( col.2, lines 45-51) and then applying a silicone release coating (col.2, lines 45-51), comprising, selecting as the primer, a solution of polyvinyl alcohol (col.3, lines 1-8).

However, Uwe et al does not disclose a primer comprising at least one silane-containing polyvinyl alcohol derived from fully or partly hydrolyzed vinyl ester copolymers having a degree of hydrolysis of 75 to 100 mol%, obtained by free-radical polymerization.

Maruyama et al (947) discloses a silane- containing polyvinyl alcohol (See silyl group –containing modified polyvinyl alcohol, col.19, lines 42-43) derived from fully

or partly hydrolyzed vinyl ester copolymer having a degree of hydrolysis of 75 to 100 mol% (col.19, lines 45-46), obtained by the free radical polymerization (See the use of radical initiator, Col. 4, line 52) of (a) vinyl ester of unbranched or branched alkylcarboxylic acids; (col. 4, lines 47-58) and (b) silane-containing, ethylenically unsaturated monomers (Col.4, lines 50-51).

Maruyama et al (239) teaches that silane-containing polyvinyl alcohol has improved surface strength, printability of paper, water affinity and water resistance under normal conditions over polyvinyl alcohol (col.2, lines 5-19).

Based on the advantages of silane-containing polyvinyl alcohol over polyvinyl alcohol of Uwe et al., as described in Maruyama et al (239), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated silane-containing polyvinyl alcohol as taught by Maruyama et al (947) into the primer of Uwe et al.

Though modified Uwe et al discloses a primer comprising a silane-containing ethylenically unsaturated monomer, it does not disclose the monomer in the ranges 0.1 to 10 or 0.01 to 1.5 mol%.

Since the instant specification is silent to unexpected results, the mol% of silane-containing ethylenically unsaturated monomers in the composition of modified Uwe et al is not considered to confer patentability to the claims. As the number of crosslinking formed by the silyl groups in the composition is a variable that can be modified, among others, by adjusting said mol% of silane-containing ethylenically unsaturated monomers, with said number of cross links increasing as the mol% of silane-containing

ethylenically unsaturated monomers increases, the precise mol% of silane-containing ethylenically unsaturated monomers in the composition of modified Uwe et al would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made. As such, without showing unexpected results, the claimed mol% of silane-containing ethylenically unsaturated monomers in the composition of modified Uwe et al cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the mol% of silane-containing ethylenically unsaturated monomers in the composition of (primary reference) to obtain the desired number of cross links and consequently the desired boiling point of the primer (In re Boesch, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (In re Aller, 105 USPQ 223).

Further, modified Uwe et al discloses the primer comprising a vinyl ester of carboxylic acid (See vinyl acetate, Maruyama et al (947), col.4, line 57), however, it does not disclose 1 to 30 mol% of the total polymer being one or more 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms, wherein the alkyl radicals have 1 to 6 carbon atoms nor that said 1-alkylvinyl esters are selected from the group consisting of 1-methylvinyl acetate, 1-ethylvinyl acetate, and 1- propylvinyl acetate, and mixtures thereof.

The higher the molecular mass and/or degree of branching of organic compounds with identical functional group, the higher the boiling point of the compound.

Vinyl acetate is an unbranched vinyl ester of carboxylic acid, with a molecular mass lower than those of 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms, with 1-methylvinyl acetate having the lowest molecular mass and 1-propylvinyl acetate having the highest molecular mass; Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated some 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms, selected from the group consisting of 1-methylvinyl acetate, 1-ethylvinyl acetate and 1-propylvinyl acetate and mixtures thereof, into the composition of modified Uwe et al in order to increase the boiling point of the primer.

Moreover, since the instant specification is silent to unexpected results, percentage mol% of the 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms, wherein the alkyl radicals have 1 to 6 carbon atoms is not considered to confer patentability to the claims. As boiling point of the primer is a variable that can be modified, among others, by adjusting said percentage mol% of the 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms, with said boiling point increasing with an increase in the percentage mol% of the 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms, the percentage mol% of the 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made. As such, without showing unexpected results, the claimed percentage mol% of the alkylvinyl ester of

carboxylic acids having 1 to 6 carbon atoms cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the percentage mol% of the 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms in the composition of modified Uwe et al to obtain the desired boiling point of the primer (In re Boesch, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (In re Aller, 105 USPQ 223).

Regarding claim 9, modified Uwe et al discloses all the claim limitations as set forth above. Further, Maruyama et al (947) discloses the process, wherein the silane-containing polyvinyl ester copolymer is a copolymer of vinyl acetate. (col.4, line 57).

Regarding claim 11, modified Uwe et al discloses all the claim limitations as set forth above. Further, Maruyama et al (947) discloses the process, wherein the silane-containing polyvinyl alcohol is obtained by copolymerizing one or more ethylenically unsaturated, silane-containing monomers selected from the group consisting of ethylenically unsaturated silicon compounds of the formula (1)  $R_1SiR_2O_2-2(OR_3)I-3$ , where  $R_1$  is  $CH_2 = CR_4CO_2(CH_2)_{0-3}$  or  $CH_2 = CR_4CO_2(CH_2)I-3$ ,  $R_2$  is a C1 to C3 alkyl radical, C1 to C3 alkoxy radical, or halogen,  $R_3$  is an unbranched or branched, unsubstituted or substituted alkyl radical having 1 to 12 carbon atoms, or is an acyl

radical having 2 to 12 carbon atoms, R3 optionally interrupted by an ether group, and R4 is H or CH<sub>3</sub>, and meth(acrylamides) containing silane groups (col.4, line 65-68, col.5, lines 8-40), of the formula (II) CH<sub>2</sub> =CR<sub>5</sub>-CO- NR<sub>6</sub>-R<sub>7</sub>-SiR<sub>8m</sub>-(R<sub>9</sub>)<sub>3-m</sub>, where m = 0 to 2, R<sub>5</sub> independently is H or a methyl group, R<sub>6</sub> is H or an alkyl group having 1 to 5 carbon atoms, R<sub>7</sub> is an alkylene group having 1 to 5 carbon atoms or a divalent organic group in which the carbon chain is interrupted by an O or N atom, R<sub>8</sub> is an alkyl group having 1 to 5 carbon atoms, and R<sub>9</sub> is an alkoxy group having 1 to 40 carbon atoms (col.5, lines 1-23 and col.5, lines 49-68), optionally substituted by heterocycles.

Regarding claim 12, modified Uwe et al discloses all the claim limitations as set forth above. Further, Maruyama et al (947) discloses the process, wherein the silane-containing polyvinyl alcohol is obtained by copolymerizing one or more ethylenically unsaturated, silane-containing monomers selected from the group consisting of  $\gamma$ -acryloyl- and  $\gamma$ -methacryloyl- oxypropyltri(alkoxy)silanes, ~-methacryloyloxymethyltri(alkoxy)silanes,  $\gamma$ -methacryloyloxypropylmethyldi(alkoxy)silanes, vinylalkyldi(alkoxy)silanes, and vinyltri(alkoxy)silanes. (See vinyltrimethoxysilane, col.19, line 41).

Regarding claim 13, modified Uwe et al discloses all the claim limitations as set forth above. Further, Maruyama et al (947) discloses the process, wherein at least one alkoxy group is selected from the group consisting of methoxy (See vinyldimethylmethoxysilane, col.5, line 29), ethoxy (See vinyltriethoxysilane, col.5, line

26), methoxyethyleneoxy ethoxyethyleneoxy, methoxypropyleneoxy and ethoxypropyleneoxy radicals.

Regarding claim 15, modified Uwe et al discloses all the claim limitations as set forth above and further discloses a release film or paper (col.1, lines 1-10), comprising: a substrate (col.2, lines 34-44), a primer coat applied to the substrate (col.2, lines 45-51), and a silicone release coating applied over the primer (col.2, lines 45-51), wherein the primer comprises a primer as set forth above.

Regarding claim 16, Uwe et al discloses a release film or paper comprising a substrate (col.2, lines 34-44), a primer coat applied to the substrate (col.2, lines 45-51), and a silicone release coating applied over the primer (col.2, lines 45-51).

However, Uwe et al does not disclose a primer comprising at least one silane-containing polyvinyl alcohol derived from fully or partly hydrolyzed vinyl ester copolymers having a degree of hydrolysis of 75 to 100 mol%, obtained by free-radical polymerization.

Maruyama et al (947) discloses a silane- containing polyvinyl alcohol (See silyl group –containing modified polyvinyl alcohol, col.19, lines 42-43)derived from fully or partly hydrolyzed vinyl ester copolymer having a degree of hydrolysis of 75 to 100 mol% (col.19, lines 45-46), obtained by the free radical polymerization (See the use of radical initiator, Col. 4, line 52) of (a) vinyl ester of unbranched or branched alkylcarboxylic

acids; (col. 4, lines 47-58) and (b) silane-containing, ethylenically unsaturated monomers (Col.4, lines 50-51).

Maruyama et al (239) teaches that silane-containing polyvinyl alcohol has improved surface strength, printability of paper, water affinity and water resistance under normal conditions over polyvinyl alcohol (col.2, lines 5-19).

Based on the advantages of silane-containing polyvinyl alcohol over polyvinyl alcohol of Uwe et al.,s described in Maruyama et al (239), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated silane-containing polyvinyl alcohol as taught by Maruyama et al (947) into the primer of Uwe et al.

Though modified Uwe et al discloses a primer comprising a silane-containing ethylenically unsaturated monomer, it does not disclose the monomer in the ranges 0.1 to 10 or 0.01 to 1.5 mol%.

Since the instant specification is silent to unexpected results, the mol% of silane-containing ethylenically unsaturated monomers in the composition of modified Uwe et al is not considered to confer patentability to the claims. As the number of cross link formed by the sily groups in the composition is a variable that can be modified, among others, by adjusting said mol% of silane-containing ethylenically unsaturated monomers, with said number of cross links increasing as the mol% of silane-containing ethylenically unsaturated monomers increases, the precise mol% of silane-containing ethylenically unsaturated monomers in the composition of modified Uwe et al would have been considered a result effective variable by one having ordinary skill in the art at

the time the invention was made. As such, without showing unexpected results, the claimed mol% of silane-containing ethylenically unsaturated monomers in the composition of modified Uwe et al cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the mol% of silane-containing ethylenically unsaturated monomers in the composition of (primary reference) to obtain the desired number of cross links and consequently the desired boiling point of the primer (In re Boesch, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (In re Aller, 105 USPQ 223).

Further, modified Uwe et al discloses the primer comprising a vinyl ester of carboxylic acid (See vinyl acetate, Maruyama et al (947), col.4, line 57), however, it does not disclose 1 to 30 mol% of the total polymer being one or more 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms.

The higher the molecular mass and/or degree of branching of organic compounds with identical functional group, the higher the boiling point of the compound.

Vinyl acetate is an unbranched vinyl ester of carboxylic acid, with a molecular mass lower than those of 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms. Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated some 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms into the composition of modified Uwe et al in order to increase the boiling point of the primer.

Moreover, since the instant specification is silent to unexpected results, percentage mol% of the 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms, wherein the alkyl radicals have 1 to 6 carbon atoms is not considered to confer patentability to the claims. As boiling point of the primer is a variable that can be modified, among others, by adjusting said percentage mol% of the 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms, with said boiling point increasing with an increase in the percentage mol% of the 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms, the percentage mol% of the 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made. As such, without showing unexpected results, the claimed percentage mol% of the alkylvinyl ester of carboxylic acids having 1 to 6 carbon atoms cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the percentage mol% of the 1-alkylvinyl esters of carboxylic acids having 1 to 6 carbon atoms in the composition of modified Uwe et al to obtain the desired boiling point of the primer (In re Boesch, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (In re Aller, 105 USPQ 223).

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLATUNDE S. OJURONGBE whose telephone number is (571)270-3876. The examiner can normally be reached on Monday-Thursday, 7.15am-4.45pm, EST time, Alt Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on (571) 272 1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

O.S.O

/Basia Ridley/  
Supervisory Patent Examiner, Art Unit 4145